

**SYSTEM AND METHOD FOR OPTIMIZING OPEN SHORTEST PATH FIRST  
AGGREGATES AND AUTONOMOUS NETWORK DOMAIN INCORPORATING THE SAME**

**ABSTRACT OF THE DISCLOSURE**

Systems and method for selecting open shortest path first (OSPF) aggregates and aggregate weights for a particular area. In one embodiment, an aggregate selecting system includes: (1) a database for containing data pertaining to candidate OSPF aggregates and corresponding weights and (2) an aggregate selector, associated with the database, that selects at least a subset of the OSPF aggregates such that the shortest path length between the particular source and destination subnets resulting from advertisement of a set of weighted aggregates approaches the shortest path length between the particular source and destination subnets irrespective of the advertisement. In one embodiment, a weight selection system includes: (1) a database for containing data pertaining to candidate OSPF aggregates and (2) a weight assigner, associated with the database, that assigns, for the OSPF aggregates, weights based on either an average distance of subnets in the area for a particular area border router (ABR) of the area or a search heuristic.